

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

IN RE: DEALER MANAGEMENT
SYSTEMS ANTITRUST LITIGATION

This Document Relates To:

Authenticom, Inc. v. CDK Global LLC, et al.,
Case No. 1:18-cv-868 (N.D. Ill.)

MDL No. 2817
Case No. 18-cv-868

Hon. Robert M. Dow, Jr.
Magistrate Judge Jeffrey T. Gilbert

PUBLIC-REDACTED

**PLAINTIFF AUTHENTICOM, INC.'S OPPOSITION TO DEFENDANTS'
MOTION TO EXCLUDE THE EXPERT TESTIMONY OF NANCY MIRACLE**

TABLE OF CONTENTS

	Page
TABLE OF AUTHORITIES	ii
INTRODUCTION	1
BACKGROUND	2
LEGAL STANDARD.....	3
ARGUMENT.....	4
I. Ms. Miracle Is Qualified as an Expert in Computer Software and Security.....	4
II. Ms. Miracle’s Reliably Applies Her Expertise to the Facts.....	6
A. Analysis of Defendants’ Technological Measures	8
B. Analysis of Authenticom’s Means of Responding to the Measures	12
C. Analysis of Whether the Measures Protected a Copyrighted Work	15
D. Analysis of Mr. Stroz’s Counting of DMCA Violations	17
CONCLUSION.....	18

TABLE OF AUTHORITIES

CASES	Page(s)
<i>Amakua v. Development LLC v. Warner</i> , No. 05 C 3082, 2007 WL 2028186 (N.D. Ill. July 10, 2007).....	8
<i>Artunduaga v. University of Chi. Med. Ctr.</i> , No. 12 C 8733, 2016 WL 7384432 (N.D. Ill. Dec. 21, 2016).....	14
<i>Avaya, Inc. v. Telecom Labs, Inc.</i> , Civ. A. No. 06-2490(GEB), 2012 WL 13035096 (D.N.J. May 1, 2012).....	7
<i>Burkhart v. Washington Metro. Area Transit Auth.</i> , 112 F.3d 1207 (D.C. Cir. 1997).....	7
<i>Daubert v. Merrell Dow Pharms, Inc.</i> , 509 U.S. 579 (1993)	5, 6, 18
<i>Dish Network, L.L.C. v. Vicxon Corp.</i> , No. 12-cv-9-L (WVG), 2013 WL 3894905 (S.D. Cal. July 26, 2013)	7
<i>Fluidmaster, Inc., Water Connector Components Prods. Liab. Litig., In re</i> , MDL No. 2575, 2017 WL 1196990 (N.D. Ill. Mar. 31, 2017).....	5
<i>Giganews, Inc. v. Perfect 10, Inc.</i> , No. CV 17-05075-AB (JPRx), 2019 WL 1422723 (C.D. Cal. Mar. 13, 2019)	15
<i>Incredible Techs., Inc. v. Virtual Techs., Inc.</i> , 400 F.3d 1007 (7th Cir. 2005)	16
<i>Kohus v. Mariol</i> , 328 F.3d 848 (6th Cir. 2003)	17
<i>Lexmark Int’l, Inc. v. Static Control Components, Inc.</i> , 387 F.3d 522 (6th Cir. 2004)	15
<i>LivePerson, Inc. v. 24/7 Customer, Inc.</i> , 83 F. Supp. 3d 501 (S.D.N.Y. 2015).....	9
<i>Manpower, Inc. v. Insurance Co. of Pa.</i> , 732 F.3d 796 (7th Cir. 2013)	3, 4, 16
<i>MDY Indus., LLC v. Blizzard Entm’t, Inc.</i> , 629 F.3d 928 (9th Cir. 2010).....	15
<i>Mintel Int’l Grp. v. Neergheen</i> , 636 F. Supp. 2d 677 (N.D. Ill. 2009)	5
<i>Pike v. Premier Transp. & Warehousing, Inc.</i> , No. 13 CV 8835, 2016 WL 6599940 (N.D. Ill. Nov. 8, 2016)	11
<i>Point 4 Data Corp. v. Tri-State Surgical Supply & Equip., Ltd.</i> , No. 11-CV-726 (CBA), 2013 WL 4409434 (E.D.N.Y. Aug. 2, 2013).....	7
<i>Smilovitz v. First Solar, Inc.</i> , No. CV12-00555-PHX-DGC, 2019 WL 6875492 (D. Ariz. Dec. 17, 2019)	8

<i>Smith v. Ford Motor Co.</i> , 215 F.3d 713 (7th Cir. 2000)	3
<i>Smolow v. Hafer</i> , 513 F. Supp. 2d 418 (E.D. Pa. 2007)	14
<i>Team Play, Inc. v. Boyer</i> , 391 F. Supp. 2d 695 (N.D. Ill. 2005)	17
<i>Tuf Racing Prods., Inc. v. American Suzuki Motor Corp.</i> , 223 F.3d 585 (7th Cir. 2000)	5, 14
<i>United States v. Conn</i> , 297 F.3d 548 (7th Cir. 2002).....	5
<i>United States v. Cross</i> , 113 F. Supp. 2d 1282 (S.D. Ind. 2000)	15
<i>United States v. Williams</i> , 865 F.3d 1328 (11th Cir. 2017)	5

STATUTE

Digital Millennium Copyright Act, 17 U.S.C. § 1201 <i>et seq.</i>	1-3, 6-9, 15, 17
17 U.S.C. § 1201(a)(1).....	8, 15
17 U.S.C. § 1201(a)(1)(A)	2
17 U.S.C. § 1201(a)(3).....	8
17 U.S.C. § 1201(a)(3)(A)	2, 12
17 U.S.C. § 1201(a)(3)(B)	2

RULES

Fed. R. Evid. 702	3
Fed. R. Evid. 703	15

OTHER MATERIALS

Dictionary of IBM & Computing Terminology.....	9
Fairchild Imaging, <i>About Us</i>	4
Fed. R. Evid. 702 advisory committee’s notes (2000).....	5

INTRODUCTION

Plaintiff Authenticom, Inc. has proffered Nancy Miracle as an expert in computer software and security to testify about technical issues that underlie Defendant The Reynolds And Reynolds Company's and Defendant CDK Global, LLC's counterclaims against Authenticom under the Digital Millennium Copyright Act ("DMCA"). Although Authenticom believes those counterclaims should be dismissed as a matter of law, there will be factual disputes for the jury to resolve if the Court denies Authenticom's motion for summary judgment. Those factual issues include the nature of the technological measures that CDK and Reynolds claim to have put in place, the ways in which Authenticom's software responded to those measures, whether the technological measures were implemented in such a way as to protect any copyrighted material, and finally, how to count the number of alleged violations for purposes of damages. Ms. Miracle will draw on more than 50 years of experience in the computer software and security fields to help the jury resolve those factual issues.

Defendants have no ground to seek exclusion of Ms. Miracle's testimony. Their principal challenge is based on a misunderstanding of the testimony that Ms. Miracle will offer. She will not – as Defendants contend – attempt to construe the DMCA for the jury. That is a question of law for the Court to resolve. She will instead offer testimony regarding technical facts that will be relevant to the jury's determination of whether there were any DMCA violations, and if so, how many. Moreover, contrary to Defendants' claim (in a variety of circumstances) that Ms. Miracle performed an inadequate investigation, in fact Ms. Miracle reviewed demonstrations of the software at issue and had the opportunity to ask knowledgeable Authenticom personnel questions during those demonstrations. Defendants fail to identify a single piece of evidence that Ms. Miracle supposedly failed to consider that would have affected her opinions.

BACKGROUND

Defendants have asserted counterclaims against Authenticom under the DMCA for allegedly circumventing technological measures that Defendants claim to have instituted to protect their dealer management system (“DMS”). *See* Dkt. 229, CDK Counterclaims ¶¶ 7, 41, 83-93; Dkt. 225, Reynolds Counterclaims ¶¶ 8, 10-11, 52-53, 71-80. The DMCA makes it unlawful to “circumvent a technological measure that effectively controls access to a work protected” by copyright law. 17 U.S.C. § 1201(a)(1)(A). The statute defines “circumvent a technological measure” to mean “descrambl[ing] a scrambled work, . . . decrypt[ing] an encrypted work, or otherwise . . . avoid[ing], bypass[ing], remov[ing], deactivat[ing], or impair[ing] a technological measure, without the authority of the copyright owner.” *Id.* § 1201(a)(3)(A). The DMCA further states that “a technological measure ‘effectively controls access to a work’ if the measure, in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work.” *Id.* § 1201(a)(3)(B).

There are three technological measures at issue. *See* Dkt. 229, CDK Counterclaims ¶¶ 83-95; Dkt. 225, Reynolds Counterclaims ¶¶ 50-53. *First*, both Reynolds and CDK implemented CAPTCHA prompts (“Computer Automated Program for Telling Computers and Humans Apart”). CAPTCHA prompts display – with varying degrees of distortion – text on the screen and ask the user to re-enter that text. *Second*, CDK put in place Yes/No Prompts at the login screen:

```
login: heidi
Password:
Last login: Thu Mar 24 09:10:10 from 139.126.150.113
A RAID EVENT has been reported in the raid event directory.
It is important to notify your CRR of this RAID EVENT as soon as possible.
The CDK Global DMS is for authorized Dealer personnel only.
Use or access by unauthorized third parties is prohibited.
Those using this system without authorization will be denied
access and may have their services revoked.
Enter "YES" to confirm you are an authorized dealer employee
in order to continue, enter "NO" to exit this program.
yes
```

See Dkt. 229, CDK Counterclaims ¶ 84. *Third*, both CDK and Reynolds put in place processes to disable user credentials that CDK and Reynolds believed were being used by data integrators (“Suspicious User ID Monitoring”).

On August 26, 2019, Defendants disclosed two computer experts to bolster the DMCA claims. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

On October 15, 2019, Reynolds moved for summary judgment on its DMCA claims against Authenticom. See Dkt. 777. Shortly thereafter, Authenticom engaged its own computer software and security expert, Nancy Miracle, to respond to the expert opinions of Messers. Tenaglia and Stroz, and to offer expert analysis of the technological measures at issue and the ways in which Authenticom’s software responded to those measures. See Dkt. 889-10, Miracle Rep. ¶ 9.

LEGAL STANDARD

Federal Rule of Evidence 702 “requires that the trial judge ensure that any and all expert testimony or evidence admitted is not only relevant, but reliable.” *Manpower, Inc. v. Insurance Co. of Pa.*, 732 F.3d 796, 806 (7th Cir. 2013) (internal quotation marks omitted). The reliability of an expert’s testimony “is primarily a question of the validity of the methodology employed by the expert, not the quality of the data used in applying the methodology or the conclusions produced.” *Id.* The “soundness of the factual underpinnings of the expert’s analysis and the correctness of the expert’s conclusions based on that analysis” are factual matters reserved for the trier of fact. *Smith v. Ford Motor Co.*, 215 F.3d 713, 718 (7th Cir. 2000). A “district court usurps

the role of the jury, and therefore abuses its discretion, if it unduly scrutinizes the quality of the expert's data and conclusions rather than the reliability of the methodology the expert employed."

Manpower, 732 F.3d at 806.

ARGUMENT

I. Ms. Miracle Is Qualified as an Expert in Computer Software and Security

Ms. Miracle is qualified as an expert in computer software and security because of her extensive experience in those fields. Ms. Miracle has more than five decades of experience in software design and has written software in more than 15 programming languages. *See* Dkt. 889-10, Miracle Rep. Ex. A. Ms. Miracle spent the first decade of her professional career in the 1960s and 1970s working at startup software companies in Silicon Valley. *See id.* From 1978 to 1990, she worked at Fairchild Camera and Instrument – including on database design and network security for the company's entire datacenter – ultimately rising to the Director of Operations. *See* Dkt. 889-11, Miracle Dep. 82:16-84:12, 91:11-21 (performed security audits).¹ From 1990 to 1998, Ms. Miracle worked at Fujitsu Personal Systems (one of the original manufacturers of palmtop computers), Networth (a manufacturer of network equipment purchased by Compaq), Intellect Network Technologies (a manufacturer of network and telecommunications equipment), and Intellect Visual Communications (an early provider of Internet-based video conferencing). *See* Dkt. 889-10, Miracle Rep. Ex. A. At Fujitsu and Networth, Ms. Miracle was the Director of Operations and Vice President of Operations, responsible for all network security. *See* Dkt. 889-11, Miracle Dep. 85:10-21.

¹ Fairchild was the pioneering semiconductor firm located in the area now known as Silicon Valley in reference to the semiconductor chips manufactured there by Fairchild and others. *See* Fairchild Imaging, *About Us* <https://www.fairchildimaging.com/about>. Fairchild Camera created sensors and semiconductors for aerial reconnaissance satellites during the Cold War and for space applications, including the Hubble Space Telescope and Mars Rover. *See id.*

Ms. Miracle is also a consultant, entrepreneur, and inventor. In 1998, she formed her consulting firm Digital Miracles that specializes in system analysis and software design, development, and implementation; she also serves as an expert witness in software and intellectual property matters (over 50 matters in the past five years). *See* Dkt. 889-10, Miracle Rep. ¶ 4 & Ex. A. She is the proprietor of a large database of uniform product codes (“UPC”) that is relied on by the world’s largest retailers to catalog inventory. And she is a holder of a patent on distributed video communications systems – that is, the Internet-based video conferencing that many have come to rely upon. *See id.* ¶ 3.

Ms. Miracle’s extensive experience is by itself sufficient to qualify her as an expert in computer software and security. *See United States v. Conn*, 297 F.3d 548, 556 (7th Cir. 2002) (“Genuine expertise may be based on experience or training.”); *Mintel Int’l Grp. v. Neergheen*, 636 F. Supp. 2d 677, 683-84 (N.D. Ill. 2009) (computer forensics expert qualified based on experience); Fed. R. Evid. 702 advisory committee’s notes (2000) (“[I]n certain fields, experience is the predominant, if not the sole, basis for a great deal of reliable expert testimony.”).

Defendants’ criticisms (at 3-4) of Ms. Miracle’s lack of “formal training” or a degree in computer science are irrelevant because of that extensive experience. *See United States v. Williams*, 865 F.3d 1328, 1339 (11th Cir. 2017); *In re Fluidmaster, Inc., Water Connector Components Prods. Liab. Litig.*, 2017 WL 1196990, at *6 (N.D. Ill. Mar. 31, 2017) (“An expert may be qualified based on experience alone. . . . And ‘the notion that *Daubert* requires particular credentials for an expert witness is radically unsound.’”) (quoting *Tuf Racing Prod., Inc. v. American Suzuki Motor Corp.*, 223 F.3d 585, 591 (7th Cir. 2000)). Indeed, the only reason Ms. Miracle does not have a degree in computer science is because she attended Stanford University

before it had established a computer science department. *See* Dkt. 889-11, Miracle Dep. 79:3-17. Even then, she was already writing and developing software.

Defendants attempt (at 3) to call into question Ms. Miracle's role in drafting her report. They fail to explain what relevance this issue has to Ms. Miracle's qualifications or to the *Daubert* analysis. It has none: Ms. Miracle testified that the opinions in her report were her own. *See* Dkt. 889-11, Miracle Dep. 19:17-20:1 (“[T]he opinions are mine. The final review is mine and the ultimate words are mine.”). Further, Defendants' criticism is based on a distortion of Ms. Miracle's testimony. Ms. Miracle did not testify (as Defendants claim) that she could not recall who drafted portions of her report. Rather, Ms. Miracle testified that there were two initial draft reports – one prepared by her and one provided to her. *See id.* at 20:2-15. Ms. Miracle merely could not remember whether she completed her draft before being provided the other draft. *See id.* at 20:2-4. And ultimately, Ms. Miracle testified she was the “hands-on person on the document” responsible for preparing the final version. *See id.* at 19:17-21:1.

II. Ms. Miracle's Reliably Applies Her Expertise to the Facts

Ms. Miracle may offer expert testimony on four factual issues that the trier of fact may need to resolve if this Court does not grant Authenticom's motion for summary judgment. *First*, Ms. Miracle has analyzed whether Defendants' technological measures are capable of distinguishing between would-be users who have authority from Defendants and those who do not. That analysis may be relevant to the jury's determination of whether those measures “effectively control access” within the meaning of the DMCA. *Second*, Ms. Miracle has assessed the technical means by which Authenticom responded to the Defendants' measures, which may be relevant to the jury's determination of whether Authenticom “circumvented” those measures within the meaning of the DMCA. *Third*, Ms. Miracle has investigated the process by which Authenticom's software “polled” (that is, accessed) Defendants' DMS, including when and whether that software

encountered Defendants’ technological measures. This is relevant to the jury’s determination of whether any copyrighted work was protected by the technological measures. *Fourth*, Ms. Miracle responded to Mr. Stroz’s efforts to count alleged DMCA violations.

Ms. Miracle’s testimony on each of these issues is reliable, as explained in below. *See infra* Parts II.A-D. It will also be helpful to the jury in resolving the technical details of Defendants’ measures and Authenticom’s responses to those measures. *See Avaya, Inc. v. Telecom Labs, Inc.*, 2012 WL 13035096, at *12 (D.N.J. May 1, 2012) (denying summary judgment on DMCA claim that turned on a “factual determination as to the nature and use of” the technological measure, which “can be resolved properly only by a finder of fact”); *Point 4 Data Corp. v. Tri-State Surgical Supply & Equip., Ltd.*, 2013 WL 4409434, at *18 (E.D.N.Y. Aug. 2, 2013) (copyright issues in computer code context require “a highly complex analysis that typically requires expert evidence”); *Dish Network, L.L.C. v. Vicxon Corp.*, 2013 WL 3894905, at *6 (S.D. Cal. July 26, 2013) (considering expert evidence for DMCA claim on summary judgment).

Defendants’ principal challenge to Ms. Miracle’s testimony is based on a misunderstanding of what that testimony will be. Defendants argue (at 4-11) that Ms. Miracle impermissibly intends to tell the jury how to construe the DMCA. But her reports do not disclose any such testimony, and she will not offer it at trial. *See* Dkt. 889-10, Miracle Rep. ¶ 27 (disclaiming any intent to offer legal opinions). Rather as explained below, Ms. Miracle will offer testimony on factual issues that will aid the jury in determining whether the DMCA has been violated. *See Burkhardt v. Washington Metro. Area Transit Auth.*, 112 F.3d 1207, 1212-13 (D.C. Cir. 1997) (“[A]n expert may offer his opinion as to facts that, if found, would support a conclusion that the legal standard at issue was satisfied.”).

To be sure, Ms. Miracle states her understanding of the governing legal standards in her report, and then frames her analyses in light of those legal standards. *See, e.g.*, Dkt. 889-10, Miracle Rep. ¶¶ 25, 29. But the fact that Ms. Miracle’s “factual conclusions are structured so as to conform to applicable underlying principles of . . . law is not exceptional; if the factual assertions were unmoored from the underlying legal framework, they would be potentially irrelevant and/or misleading.” *Amakua v. Development LLC v. Warner*, 2007 WL 2028186, at *12 (N.D. Ill. July 10, 2007). In all events, the possibility that Ms. Miracle could offer testimony amounting to impermissible legal conclusions or legal interpretation provides no basis to exclude her testimony in its entirety; Defendants may object to such testimony at trial, and the trial judge can rule on those objections with more complete context for the testimony offered by Ms. Miracle. *See Smilovitz v. First Solar, Inc.*, 2019 WL 6875492, at *6 (D. Ariz. Dec. 17, 2019) (“Defendants may object at trial if they believe Davisson crosses the line into inadmissible legal conclusions.”); *Mintel*, 636 F. Supp. 2d at 683 (providing guidance on what testimony would be allowed at trial).

A. Analysis of Defendants’ Technological Measures

The DMCA applies only to technological measures that “effectively control[] access” to a copyrighted work. 17 U.S.C. § 1201(a)(1). The DMCA specifies that a measure effectively controls access “if the measure, in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner.” *Id.* § 1201(a)(3). As explained in Authenticom’s motion for summary judgment, when properly interpreted, this provision restricts application of the DMCA to technological measures that are capable of distinguishing between those would-be users who have “authority” from the copyright owner and those who do not. *See* Dkt. 978, at 49-51. Summary judgment is warranted in favor of Authenticom because the evidence is undisputed that none of Defendants’ technological measures were capable of distinguishing between would-be users who have “authority” and those

who do not. *See id.* at 49-55. However, if this Court denies that motion and concludes there is a dispute of fact on that issue, Ms. Miracle will provide testimony that will be helpful to the jury in resolving that factual dispute.²

Drawing on her computer security expertise, Ms. Miracle will explain to the jury what types of technological measures are capable of distinguishing between would-be users with authority and those without authority – namely, those measures that “requir[e] the application of information (such as a password) available to the user that indicates that the user possesses the authority to gain access.” Dkt. 889-10, Miracle Rep. ¶ 27. For example, “[p]assword protection is a clear sign that the computer or network administrator has implemented an access-control procedure that provides, through technological means, authorization for some users (those with passwords) but not others (those without passwords) to obtain access to the password-protected material,” *id.* ¶ 26, and thus password protection is a technological measure covered by the DMCA. *See LivePerson, Inc. v. 24/7 Customer, Inc.*, 83 F. Supp. 3d 501, 510 (S.D.N.Y. 2015) (password protection, encryption measures, and activation and validation keys are covered by the DMCA).

² Defendants cite several sources (at 8-9) defining the term “access control” in other contexts in an attempt to bolster their interpretation of the DMCA. Because Ms. Miracle is not offering testimony to interpret the DMCA, these sources are irrelevant to the admissibility of her testimony. They also provide little support for Defendants’ erroneous statutory interpretation. For example, the National Institute of Standards and Technology (“NIST”) has issued guidance defining “access control” in many contexts, *see* Dkt. 978, at 50-51 (citing Exhibit 160), and even the one Defendants choose to present here necessarily includes “authorization” of users. *See* Dkt. 889-11, Miracle Dep. 191:7-192:1 (discussing one NIST definition of “access control” as “the process of *permitting or restricting access* to applications at a granular level such as *per user*, *per group*, and *per resource*,” which Ms. Miracle explained necessarily involves “authorization” in the step of “permitting or restricting access”) (emphases added). Likewise, Defendants cite (at 9) the Dictionary of IBM & Computing Terminology, which defines access control to be “‘the process of ensuring that the resources of a computer system can be accessed only by *authorized users* in authorized ways’” – again demonstrating that authorization of the would-be user is quintessential to an “access control.”

By contrast, she will explain that Defendants’ technological measures had no capability to distinguish between would-be users who had authority and those who did not. She analyzed the specific CAPTCHA used by Defendants and concluded that those CAPTCHA did not require information that “is not in the unique possession of [an authorized] user”; instead their CAPTCHA “allow[ed] access to anyone that [could] provide the answers to the CAPTCHA prompts, which offer[ed] – on their face – all information that is required to satisfy the CAPTCHA.” Dkt. 889-10, Miracle Rep. ¶¶ 31-34, 41-43, 78-80, 113-116. Similarly, Ms. Miracle reviewed the challenge prompts used by Defendants (one example being the Yes/No prompt implemented by CDK, *see supra* p. 2), and will explain those prompts “relie[d] on knowledge” that was “universally known” and therefore did “not indicate anything about the user’s authorization (or lack thereof).” *Id.* ¶¶ 48-49, 52, 54. Finally, Ms. Miracle will explain how CDK’s and Reynolds’s “Suspicious User ID Monitoring” programs worked, and most importantly, what they failed to do: require a would-be user to provide any information that would demonstrate authorization. *See id.* ¶¶ 58-59.³

Defendants’ attempt to cast doubt on the reliability of Ms. Miracle’s analysis of CAPTCHA is unavailing. *First*, they contend (at 11-12) that Ms. Miracle did not sufficiently examine Defendants’ CAPTCHA or the processes that Authenticom used to respond to them. To the contrary, Ms. Miracle reviewed both recorded and live demonstrations of Authenticom’s software interacting with Defendants’ CAPTCHA prompts. *See* Dkt. 889-10, Miracle Rep. ¶¶ 71, 87, 113.

³ Defendants’ claim (at 15) that NIST standards classify their “Suspicious User ID Monitoring” programs as an “access control.” This has no relevance to Ms. Miracle’s expert testimony of how those programs functioned. The claim is also wrong. The document Defendants cite is about “account management,” Dkt. 889-43, and Ms. Miracle explains that only portions of the document are properly categorized as “access controls,” Dkt. 889-11, Miracle Dep. 205:8-212:16. If anything, the document supports Authenticom in stating the “control” involves “authoriz[ing] access to the information on the system based on: 1. *A valid access authorization. . . .*” Dkt. 889-43, at 3 (emphasis added).

During both, she was able to ask questions of Authenticom personnel about the functioning of Authenticom's software. *See* Dkt. 889-11, Miracle Dep. 148:1-10. She also confirmed that the demonstrations were representative of Defendants' CAPTCHA prompts and the methods by which Authenticom responded to them throughout the relevant period. *See id.* at 305:13-307:9 ("THE WITNESS: I probably used the word 'typical,' but I asked them, is this how it works in general. Is this the typical way this works. . . . Q. What did they say? A. They said, yes Q. What about typicality across time? A. Well, I asked them, has this changed. I didn't say, you know, has it changed between Date A and Date B. I said, has it changed over time, and they said, really not."). And while Defendants note (at 12) that Ms. Miracle did not review the source code for Authenticom's or Defendants' software, they make no attempt to explain why such a review would have been pertinent to Ms. Miracle's opinions. In any event, a purported failure to consider relevant evidence goes to weight, not admissibility – especially where the Defendants fail even to articulate why Ms. Miracle needed to consider additional evidence. *See Pike v. Premier Transp. & Warehousing, Inc.*, 2016 WL 6599940, at *5 (N.D. Ill. Nov. 8, 2016).

Second, they wrongly claim (at 12-14) that Ms. Miracle's analysis of CAPTCHA is contradictory. Defendants note that Ms. Miracle (and others) agree that CAPTCHA may be deployed to block automated access to systems. But as Ms. Miracle explained that merely means CAPTCHA controls the *method* of how a system is accessed. *See* Dkt. 889-10, Miracle Rep. ¶ 43 ("CAPTCHA hinders automated access, because *some* computers may not be able to answer the CAPTCHA prompt without human assistance."). CAPTCHA is not used to control *who* accesses a system. *See* Dkt. 889-11, Miracle Dep. 123:7-20 ("CAPTCHA doesn't say anything about authorization."). For example, Ms. Miracle explained she uses CAPTCHA on her website as a means of identifying a method of access (automation) to redirect that method of access to a

different way of accessing her website; she does not use CAPTCHA to determine who may or may not access her website because CAPTCHA cannot fulfill that role. *See id.* at 307:10-308:18.⁴

B. Analysis of Authenticom’s Means of Responding to the Measures

The scope of the DMCA is also restricted to acts of “circumvent[ion],” which under the act means “to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure.” 17 U.S.C. § 1201(a)(3)(A). Here too, summary judgment should be granted in Authenticom’s favor because there is no factual dispute that Authenticom complied with technological measures and did not “avoid, bypass, remove, deactivate, or impair” them. *See* Dkt. 978, at 41-46. But if this Court determines there is a question of fact to be resolved on this issue, the jury will need to determine whether the technical means used by Authenticom to respond to the technological measures are prohibited by the DMCA. Ms. Miracle will provide helpful expert testimony to resolve that dispute.

Ms. Miracle will explain the technical means that Authenticom used to respond to Defendants’ measures to aid the jury in determining whether there was any “circumvention.” She will demonstrate that each of the technical methods used by Authenticom – including the use of software to “interpret” CAPTCHA (like Teseract) or to “read” the expected answer from computer memory – resulted in Authenticom supplying the answer that was expected by Defendants’ CAPTCHA prompt. *See* Dkt. 889-10, Miracle Rep. ¶¶ 35-39, 44, 46; Dkt. 889-11, Miracle Dep. 251:12-257:15 (describing technical functioning of autoCAPTCHA).⁵ Likewise, Authenticom

⁴ Defendants challenge (at 14-15) Ms. Miracle’s analysis of “Yes/No Prompts” on the same grounds as their challenges to Ms. Miracle’s CAPTCHA analysis. Their challenges to the “Yes/No Prompts” therefore fail as well.

⁵ Defendants note (at 12) that Ms. Miracle answered affirmatively in response to a question concerning Authenticom’s ability “to bypass . . . CAPTCHAs.” Dkt. 889-11, Miracle Dep. 235:2-4. But Ms. Miracle explained she misunderstood the question and did mean to testify that

supplied the expected answer for CDK's Yes/No prompts. *See* Dkt. 889-10, Miracle Rep. ¶¶ 51, 53. And she will explain to the jury how Authenticom's Profile Manager program functioned: it used built-in DMS functionality that CDK provided to dealers for the purpose of re-enabling user accounts that had been disabled by CDK; it did not use any DMS functionality in a manner that the functionality was not designed to be used. *See id.* ¶¶ 61-63. By contrast, Ms. Miracle will explain to the jury how malicious actors may "bypass" or "avoid" access controls (like password prompts) without complying with those controls; none of those methods were employed by Authenticom. *See* Dkt. 889-11, Miracle Dep. 141:21-142:16, 212:17-213:16, 226:20-228:3, 281:6-15, 283:12-284:6.⁶

Defendants argue (at 16) that Ms. Miracle did not have a sufficient factual basis to offer an opinion about Profile Manager. But Ms. Miracle described how that application functioned in her report, *see* Dkt. 889-10, Miracle Rep. ¶¶ 61-63, and explained she obtained that understanding by interviewing Authenticom personnel, *see* Dkt. 889-11, Miracle Dep. 146:4-8 ("[M]y knowledge [of] profile manager comes from my interviews with [Authenticom]."). Pertinent to her analysis was the fact that Authenticom did not use disabled or deactivated credentials to access Defendants' DMS. *See* Dkt. 889-10, Miracle Rep. ¶ 63. Thus, Defendants' statement (at 16) that Ms. Miracle's testified that she would need to review code to evaluate whether using disabled or deactivated credentials was circumvention is wholly irrelevant. Further, Defendants make much of Ms. Miracle not citing to her interviews of Authenticom in her discussion of Profile Manager. *See* Dkt.

Authenticom "bypass[ed] . . . CAPTCHA." *Id.* at 308:19-309:13. Defendants' contention (at 12-13 n.7) that Ms. Miracle lacked candor raises (at best) a credibility issue for the jury to resolve.

⁶ Defendants incorrectly assert (at 16 n.9) that Ms. Miracle offered no opinion on whether Authenticom circumvented their "Suspicious User ID Monitoring" programs. She did with respect to Authenticom's use of Profile Manager for CDK's DMS. *See* Dkt. 889-10, Miracle Rep. ¶¶ 61-63; Dkt. 889-11, Miracle Dep. 284:16-285:20.

889-10, Miracle Rep. ¶¶ 61-63. But Ms. Miracle acknowledged this was a clerical mistake. Dkt. 889-11, Miracle Dep. 303:17-305:12. And contrary to Defendants’ claim (at 17) that Ms. Miracle could not explain what information in her report she obtained from the interviews, Ms. Miracle testified that she had obtained *all* the information in her report about Profile Manager from interviews with Authenticom employees. *See id.* at 304:19-305:1 (“Q. And what information specifically that you remember did you learn from the Authenticom security interview? . . . All of this, actually.”).⁷

Nor was there anything improper about Ms. Miracle relying on Authenticom employees for the facts to which she applied her expert analysis. Indeed, at Defendants’ request and before Ms. Miracle’s deposition, Authenticom disclosed the participants in those interviews, which included Authenticom’s Chief Operating Officer – who is responsible for all software development. *See* Ex. B; Dkt. 980-35, Declaration of Brian Clements. It is eminently reasonable for a computer software and security expert (like Ms. Miracle) to rely on representations of the individual responsible for software development (like Mr. Clements) for information about how Profile Manager worked. *See Tuf*, 223 F.3d at 591 (proper reliance on “financial information furnished by [client] and assumptions given him by counsel of the effect of the termination on Tuf’s sales”); *Artunduaga v. Univ. of Chi. Med. Ctr.*, 2016 WL 7384432, at *5 (N.D. Ill. Dec. 21, 2016) (no error in expert relying on “self-serving” declaration); *Smolow v. Hafer*, 513 F. Supp. 2d

⁷ Defendants complain (at 17) that Ms. Miracle could not recall some details from the interviews. But any pertinent details are in her report. Ms. Miracle explained she recorded notes from the interviews directly into the Microsoft Word document that is now her report. *See* Dkt. 889-11, Miracle Dep. 127:1-129:17 (“Q. Is there one document that includes your notes from both interviews? A. Yes, this report. . . . Q. So you believe your notes from the interview, you took them in the working draft of your document? A. Almost certainly, that’s my normal practice.”).

418, 427 (E.D. Pa. 2007) (“[I]nterviews with agency or ‘company personnel’ are ‘normally and reasonably relied upon by accountants’ under Rule 703.”) (citation omitted).⁸

C. Analysis of Whether the Measures Protected a Copyrighted Work

The DMCA applies only to technological measures that “control[] access to a work protected” by the Copyright Act. 17 U.S.C. § 1201(a)(1). Defendants thus bear the burden of proving both that their technological measures prevented access to a work and further that the work is protected by copyright. *See Lexmark Int’l, Inc. v. Static Control Components, Inc.*, 387 F.3d 522, 550 (6th Cir. 2004) (“To the extent the [work] is not a ‘work protected under the copyright statute,’ . . . the DMCA necessarily would not protect it.”); *id.* at 547 (DMCA does not “appl[y] to otherwise-readily-accessible copyrighted works”); *MDY Indus., LLC v. Blizzard Entm’t, Inc.*, 629 F.3d 928, 952-53 (9th Cir. 2010) (same). Defendants have failed to carry that burden as a matter of law because (1) the three measures do not protect the only work (executable code) for which Defendants may have competent proof of copyright protection, and (2) for other works (such as the look-and-feel of the software), Defendants have no competent proof because they have not disclosed any expert testimony, which is required to prove those works are subject to copyright protection. *See* Dkt. 978, at 46-49.

But if this Court determines that there are factual disputes on these points – whether the measures protect certain works or copyrightable aspects – Ms. Miracle will offer helpful expert testimony. Ms. Miracle will explain to the jury (by demonstration if allowed) what happens

⁸ Defendants’ cases (at 17) are far afield. Those cases do not stand for the remarkable proposition that an expert may not rely on representations from a client for the facts to which the expert applies his or her expertise (as Defendants claim); they stand for the proposition that an expert may not rely on a client for the existence of the expertise that the expert purports to bring to the case. *See Giganews, Inc. v. Perfect 10, Inc.*, 2019 WL 1422723, at *2 (C.D. Cal. Mar. 13, 2019); *United States v. Cross*, 113 F. Supp. 2d 1282, 1285-86 (S.D. Ind. 2000). Here, Ms. Miracle’s expertise is independent of any facts she obtained from Authenticom.

technically when Authenticom’s software attempts to access Defendants’ DMS. *See* Dkt. 889-10, Miracle Rep. ¶¶ 65-122 (description of Authenticom’s polling process and the specific DMS screens and prompts encountered by those software processes). Among other things, she will demonstrate that Authenticom’s software does not encounter any technological measures before Defendants’ allegedly copyrightable executable code is accessed. *See id.* ¶¶ 74-75, 83-84, 89-92, 114-115. She will also distill the precise screens encountered by Authenticom’s polling software after encountering any technological measure. *See id.* ¶¶ 98-100, 110. Ms. Miracle will also offer expert testimony that those screens were dictated by functional considerations, *see id.* ¶¶ 111-112, which will be relevant to a determination whether they were creative expression subject to copyright protection. *See Incredible Techs., Inc. v. Virtual Techs., Inc.*, 400 F.3d 1007, 1012, 1014 (7th Cir. 2005) (look-and-feel of software “dictated by functional considerations” is “excluded from copyright protection”).

Defendants incorrectly claim (at 18-19) that Ms. Miracle has “no knowledge of when or where CAPTCHA prompts occur on the ERA Ignite platform outside of the three instances she viewed.” Ms. Miracle confirmed that the demonstrations showed how the software worked throughout the relevant period. *See* Dkt. 889-11, Miracle Dep. 305:13-307:9. Notably, Defendants do not contest the representativeness of the demonstrations; they carefully word their argument to say only that Ms. Miracle has not proven the demonstrations were representative. If the demonstrations reviewed by Ms. Miracle (which were provided to Defendants) were not representative, Defendants could have (but did not) explore those differences with Ms. Miracle at her deposition, and Defendants will have another chance at trial. These issues go to weight not admissibility. *See Manpower*, 732 F.3d at 806 (“The soundness of the factual underpinnings of

the expert's analysis" are a "factual matter[] to be determined by the trier of fact.") (internal quotation marks omitted).

Finally, although, as Defendants note (at 19), the Seventh Circuit has held that copyrightability must be resolved by the Court, expert testimony that bears on copyrightability is still appropriate (even if it is relevant to the Court's determination and not the jury's). "The district courts may and do rely on expert testimony to distinguish between protected and unprotected material in a work for which copyright is claimed." *Team Play, Inc. v. Boyer*, 391 F. Supp. 2d 695, 699-700 (N.D. Ill. 2005) (citing cases, including *Kohus v. Mariol*, 328 F.3d 848, 854-55 (6th Cir. 2003)). Indeed, for the reasons explained in Authenticom's motion for summary judgment, Defendants were *required* to submit expert testimony to establish copyrightability in technical areas like software design. *See* Dkt. 978, at 48-49.

D. Analysis of Mr. Stroz's Counting of DMCA Violations

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Ms. Miracle applies her expertise as a programmer to explain why a jury should not give that opinion any weight. As Ms. Miracle explains, software programmers "share code with third parties for a wide variety of reasons," including efficiency. Dkt. 889-10, Miracle Rep. ¶ 124. The mere fact that a query was executed on CDK's DMS that resembled a query found in Authenticom documents does not mean that Authenticom was the entity that executed the query. *See id.* ¶¶ 124-125. Accordingly, it would be error to attribute a DMCA violation to Authenticom based on the

similarity of queries. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] that is sufficient reason to exclude Mr. Stroz's analysis under *Daubert*. See Dkt. 861, at 21-22 (*Daubert* motion filed against Mr. Stroz, citing Exhibits P and Q).

Defendants do not question the reliability Ms. Miracle's expert analysis – that code is frequently shared and therefore conclusions cannot be drawn regarding the entity that executed code based on mere query similarity – and so there is no basis to exclude her testimony. Defendants note (at 19-20) that Mr. Stroz's [REDACTED] was not his exclusive basis for attributing DMCA violations to Authenticom. Nonetheless, his [REDACTED] was part of his analysis, and Ms. Miracle's testimony will be helpful to a jury in evaluating that part of Mr. Stroz's analysis. That testimony is especially relevant given that Mr. Stroz's only other "basis"

[REDACTED]

[REDACTED]

CONCLUSION

For the foregoing reasons, Defendants' motion to exclude the testimony of Ms. Miracle should be denied.

Dated: May 29, 2020

Respectfully submitted,

/s/ Derek T. Ho

Derek T. Ho

**KELLOGG, HANSEN, TODD,
FIGEL & FREDERICK, P.L.L.C.**

1615 M Street, NW, Suite 400

Washington, D.C. 20036

(202) 326-7900

dho@kellogghansen.com

Counsel for Authenticom, Inc.

CERTIFICATE OF SERVICE

I, Derek T. Ho, an attorney, hereby certify that on May 29, 2020, I caused a true and correct copy of the foregoing **PLAINTIFF AUTHENTICOM, INC.'S OPPOSITION TO DEFENDANTS' MOTION TO EXCLUDE THE EXPERT TESTIMONY OF NANCY MIRACLE** to be filed and served electronically via the court's CM/ECF system. Notice of this filing will be sent by email to all parties by operation of the court's electronic filing system or by mail to anyone unable to accept electronic filing as indicated on the Notice of Electronic Filing. Parties may access this filing through the court's CM/ECF system. Copies of the Under Seal filing were served on counsel of record via email.

/s/ Derek T. Ho

Derek T. Ho

**KELLOGG, HANSEN, TODD,
FIGEL & FREDERICK, P.L.L.C.**

1615 M Street, NW, Suite 400

Washington, D.C. 20036

(202) 326-7900

dho@kellogghansen.com